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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/842,749

04/25/2001

Yosef Haimovitch

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8285

7590

06/16/2004

ABELMAN FRAYNE & SCHWAB
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New York, NY 10017

EXAMINER

NGUYEN, NAM V

ART UNIT

PAPER NUMBER

2635

10

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/842,749

Applicant(s)

HAIMOVITCH ET AL.

Examiner

Nam V Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-11,16,18,27,28 and 30-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,4-6,9-11,16,18,27,28,30-38 and 40-49 is/are allowed.
- 6) ☒ Claim(s) 1,7 and 8 is/are rejected.
- 7) ☒ Claim(s) 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

This communication is in response to applicant's response to an Amendment A which is filed April 1, 2004.

An amendment to the claims 3, 12-15, 17, 19, 32, 35-38, 41 and 44-49 has been entered and made of record in the application of Haimovitch et al. for an "apparatus and methods for cellular communication" filed April 25, 2001.

Claims 3, 12-15, 17, 19-26, 29 are cancelled.

Response to Arguments

In view of applicant's amendment to amend the specification in paragraph contains "then" to "than", examiner has withdrawn the objection.

On page 14, last paragraph, Applicant's arguments with respect to the specification that the support for Claim 1 is found in Fig. 32 and in the specification on page 18, lines 19-32 is not persuasive.

As defined by claim 1, Examiner does not acknowledge that the specification on page 18, lines 19 to 32 and Figure 32 discloses or states that " wherein at least some of the messages broadcast by at least some of the base stations include an indication of the time at which a future receiving window is due to open." The ASSIGN SLOTS

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command is an interrogation cycle for assigning communications slots for tags and it valid only for wakeups commands.

Lo teaches that wherein each base station (66) is operative to broadcast messages (10) (i.e. forward channel) which are received by the plurality of tags (72) (i.e. mobile identifier or mobile station) (column 3 lines 37 to 62; see Figures 1 and 3) and has a receiving window (i.e. reverse channel) during which it is operative to receive messages (23, 25, 27 and 29) (i.e. message bursts) sent by individual tags (mobile station A, B or C) from among the plurality of tags (mobile station A, B or C) (column 5 lines 23 to 60; ; see Figures 1-3), and wherein at least some of the messages broadcast (i.e. message bursts) by at least some of the base stations (66) include an indication of the time (channel slot) at which a future receiving window is due to open (i.e. a next channel slot is open for contention) (column 4 lines 54 to 64; column 5 lines 24 to 60; see Figures 3-4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to add a base station transmits a message includes a next available channel slot to mobile stations of Lo in an active RF transponder with a wake-up circuit that wakes the RF transponder from a sleep state upon detection of an RF interrogating signal of Friedman et al. with the motivation for doing so would have been to provide the tag to response in a particular time slotted manner to an interrogator in order to extend the battery life and also to avoid collision. The examiner maintains that the references cited and applied in the last office actions for the rejection of the claims are maintained in this office action.

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Applicant's argument and amendment with respect to the pending claims 2, 4-6, 9-11, 16, 18, 27-28, and 30-38 are persuasive. Therefore the examiner has withdrawn the rejections.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedman et al. (US# 6,593,845) in view of Lo (US# 5,166,929).

Referring to claim 1, Friedman et al. disclose a tag interrogation system (column 1 lines 24 to 37) comprising:

At least one base station (an RF interrogator); and

A plurality of tags (RF transponders), each having an awake mode (i.e. operating mode) and a sleep mode (i.e. low power mode) (column 1 lines 54 to column 2 line 5; see Figures 1-2);

However, Friedman et al. did not explicitly disclose wherein each base station is operative to broadcast messages which are received by the plurality of tags and has a receiving window during which it is operative to receive messages sent by individual tags

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from among the plurality of tags, and wherein at least some of the messages broadcast by at least some of the base stations include an indication of the time at which a future receiving window is due to open, thereby to allow tags to conserve power by remaining in said sleeping mode until said future receiving window opens.

In the same field of endeavor of multiple access radio communication system, Lo teach that wherein each base station (66) is operative to broadcast messages (10) (i.e. forward channel) which are received by the plurality of tags (72) (i.e. mobile identifier or mobile station) (column 3 lines 37 to 62; see Figures 1 and 3) and has a receiving window (i.e. reverse channel) during which it is operative to receive messages (23, 25, 27 and 29) (i.e. message bursts) sent by individual tags (mobile station A, B or C) from among the plurality of tags (mobile station A, B or C) (column 5 lines 23 to 60; ; see Figures 1-3), and

wherein at least some of the messages broadcast (i.e. message bursts) by at least some of the base stations (66) include an indication of the time (channel slot) at which a future receiving window is due to open (i.e. a next channel slot is open for contention) (column 4 lines 54 to 64; column 5 lines 24 to 60; see Figures 3-4) in order for the base station received the response uplink signals from the mobile stations correctly.

One of ordinary skilled in the art recognizes the need to add a base station transmits a message includes a next available channel slot to mobile stations of Lo in an active RF transponder with a wake-up circuit that wakes the RF transponder from a sleep state upon detection of an RF interrogating signal of Friedman et al. because Friedman et al. suggest it is desired to provide that an interrogator to send a message with a code sequence modulated in the RF signals to wake up the RF transponder then return to the

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sleep mode after a predetermined period of time (column 6 line 60 to column 7 line 12; see Figures 1-4) and Lo teaches a mobile station determines to wait until the next available time slot is open for contention to transmit the message to the base station. The base station indicates the status of the channel as being idle, when mobile stations are not sending any burst (column 4 lines 54 to column 5 line 60) in order to indicate when to transmit a response signal from mobile stations and to avoid collision. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to add a base station transmits a message includes a next available channel slot to mobile stations of Lo in an active RF transponder with a wake-up circuit that wakes the RF transponder from a sleep state upon detection of an RF interrogating signal of Friedman et al. with the motivation for doing so would have been to provide the tag to response in a particular time slotted manner to an interrogator in order to extend the battery life and also to avoid collision.

Referring to claim 7, Friedman et al. in view of Lo disclose a system according to claim 1, Lo discloses wherein each tag (72) comprises a mobile tag (column 3 lines 37 to 49; see Figures 2 and 3).

Referring to claim 8, Friedman et al. in view of Lo disclose a system according to claim 1, Lo discloses wherein communication between base units (66) and tags (72) comprises wireless communication (column 3 lines 37 to 49; see Figures 2 and 3).

Allowable Subject Matter

Claims 2, 4-11, 16, 18, 27-28 and 30-49 are allowed as evident by applicant's amendment and argument.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 703-305-3867. The examiner can normally be reached on Mon-Fri, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Nam Nguyen
June 14, 2004



MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

